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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/430,501	10/29/1999	DONGMING HWANG	RAL9-99-0110,	7395

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EXAMINER

KUMAR, PANKAJ

ART UNIT	PAPER NUMBER
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2631

DATE MAILED: 08/07/2003

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Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/430,501

Applicant(s)

HWANG ET AL.

Examiner

Pankaj Kumar

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 10/25/2002.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-37 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-6,9-13,17-23,26-33,36 and 37 is/are rejected.
- 7) ☒ Claim(s) 7,8,14-16,24,25,34 and 35 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Response to Arguments

1. Applicant's arguments originally filed 10/25/2002 have been fully considered but they are not persuasive.

2. Applicant argues that Kaku does not teach updating a carrier drop detection threshold based on the received signal responsive to a selected data pattern in the signal data since Kaku does not detect a particular bit pattern and adjust a threshold but instead adds a tonal signal that is passed through a filter. This respectfully traversed. First, bit pattern is not claimed; instead data pattern is claimed. In any event, there is an A/D converter in fig. 7 of Kaku. Second, Kaku teaches in fig. 7, that there is a tone signal (83) that is passed through a filter (82); however, this does not dismiss Kaku showing the limitation of updating a carrier drop detection threshold (Kaku fig. 9: setting threshold level to one level in S1 and setting threshold level to a second level in S2) based on the received signal (Kaku fig. 7: 24, carrier detection is after element 24; fig. 9: once the received signal energy is such that decision S2 is made) responsive to a selected data pattern (Kaku fig. 10: carrier drop detection threshold (CDI) is responsive to the filter output which is a selected data pattern. CDI in fig. 10b changes depending on the filter output in fig. 10a) in the signal data (Kaku fig. 7, 10a: the data pattern on fig. 10a which is the output of the filter 82 in fig. 7, is based on the signal data before 82)

3. Applicant also argues that claim 17 teaches a threshold circuit latching a carrier drop detection threshold. This is respectfully traversed since claim 17 reads "a threshold circuit coupled to the receiver circuit that latches a carrier drop detection threshold". Hence, the receiver circuit can latch a carrier drop detection threshold (Kaku fig. 7 is a receive circuit and

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fig. 9 shows setting the threshold which is equivalent to latching the threshold for the purpose of on and off CDI – carrier detection indication) and the threshold circuit is just coupled to the receiver circuit (Kaku fig. 9 is part of fig. 7).

4. Applicant also argues that Kaku does not update the threshold based on a JM or CM signal. This is respectfully traversed. CM is the signal sent by the call modem and received by the answer modem and JM is the signal sent by the answer modem and received by the call modem, as discussed in the first office action page 3. Kaku's fig 7 is updating the threshold as already discussed and fig. 7 is based on the JM or CM signal since fig. 7 is a modem (modulating and demodulating) communicating with another modem and thus it is an call and answer modem depending on its action at a particular time.

5. Applicant also argues that for claims 3, 13, 20 and 30, that they recite latching a signal strength based on detection of a selected bit pattern. This is respectfully traversed since no such recitation is found in the claims. Applicant also argues that Kaku does not teach establishing a threshold based on a latched signal strength. This is respectfully traversed. In Kaku fig. 9, the latched signal strength is P. Threshold level is adjusted (by being set in S4) based on the outcome of the decision in S2 based on P. If the answer to S2 is always no, S4 will never occur. Similarly, S1 is set (after the loop in fig. 9 has started) when decision based on P in S5 is a yes. If the decision in S5 is always no, the threshold in S1 and S2 will never be set again.

Information Disclosure Statement

6. The information disclosure statement filed 7/3/2000 fails to comply with 37 CFR 1.98(a)(2), which requires a legible copy of each U.S. and foreign patent; each publication or that

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portion which caused it to be listed; and all other information or that portion which caused it to be listed. It has been placed in the application file, but certain information referred to therein has not been considered.

7. The non-patent literature and foreign patent item 160 have not been considered since it does not exist in the file wrapper.

8. Also, contrary to what the filing on 6/25/2003 says, there were no literature copies and no IDS, duplicate or otherwise, filed on 6/25/2003.

Response to Amendment

Claim Rejections - 35 USC § 102

9. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

10. Claims 1-6, 9-13, 17-23, 26-33, 36-37 are rejected under 35 U.S.C. 102(b) as being anticipated by Kaku et al. See prior action for details.

Allowable Subject Matter

11. Claims 7, 8, 14, 15, 16, 24, 25, 34, 35 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims. The following is a statement of reasons for the indication of allowable subject matter: see prior action for details.

Conclusion

12. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Pankaj Kumar whose telephone number is (703) 305-0194. The examiner can normally be reached on Mon, Tues, Thurs and Fri after 8AM to after 6:30PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chi H. Pham can be reached on (703) 305-4378. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 872-9314 for regular communications and (703) 872-9314 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-4700.

PK
July 31, 2003


DON N. VO
PRIMARY EXAMINER